

CLAIMS

What is claimed is:

1. A cryptographic component comprising:
a communication component that receives a request for decryption information from a BIOS component; and,
a retrieval component that retrieves decryption information based, at least in part, upon the request, the retrieval component providing the decryption information to the communication component, the communication component providing the decryption information to the BIOS component.
2. The component of claim 1, the decryption information comprising at least one of a decryption key, an encrypted decryption key and a decryption algorithm.
3. The component of claim 1, further comprising a storage component that facilitates storage of encryption information.
4. The component of claim 1 employed during an operating system boot process.
5. The component of claim 4, the boot process occurring after a hibernate mode.
6. The component of claim 1 employed to secure access to at least one device.
7. The component of claim 6, the device comprising a storage volume, a video display, an input device and an output device.
8. A BIOS cryptographic system comprising:
a BIOS component that facilitates a secure boot process of a computer system;
an operating system loader that facilitates loading of an operating system for the computer system; and,

a cryptographic component that serves as an interface between the BIOS component and the operating system loader, the cryptographic component providing decryption information to the BIOS component in response to a request for decryption information from the BIOS component.

9. The system of claim 8, employed to facilitate decryption of a file associated with a hibernate mode.

10. The system of claim 8, the BIOS component employing a decryption algorithm to facilitate the secure boot of the computer system.

11. The system of claim 10, the decryption algorithm comprising a symmetric algorithm

12. The system of claim 11, the decryption algorithm comprising RC2, RC4, Data Encryption Standard (DES), 3DES or AES.

13. The system of claim 10, the decryption algorithm comprising an asymmetric algorithm.

14. The system of claim 13, the decryption algorithm comprising RSA.

15. The system of claim 8, the decryption information comprising at least one of a decryption key, an encrypted decryption key and a decryption algorithm.

16. The system of claim 8, the cryptographic component comprising a decryption information store that securely stores the decryption information.

17. The system of claim 16, the decryption information comprising a decryption key.

18. The system of claim 17, the decryption key retrieved through an ACPI control method.
19. The system of claim 17, the decryption key retrieved through a BIOS boot interface.
20. The system of claim 8, the cryptographic component comprising an encryption information store that securely stores encryption information.
21. The system of claim 20, the encryption information comprising an encryption key.
22. The system of claim 20, the encryption key stored through an ACPI control method.
23. The system of claim 21, the encryption key stored through a BIOS boot interface.
24. The system of claim 8, the request for decryption information being based, at least in part, upon receipt of a BIOS password.
25. A method of securely restarting a computer system comprising:
 - verifying a credential of a user;
 - retrieving decryption information;
 - employing the decryption information to decrypt a hibernate file.
26. The method of claim 25, the credential comprising a password.
27. The method of claim 25, the decryption information comprising at least one of a decryption key, an encrypted decryption key and a decryption algorithm.

28. A computer readable medium having stored thereon computer executable instructions for carrying out the method of claim 25.
29. A method of securely using a computer system comprising:
 - verifying a credential of a user;
 - retrieving decryption information;
 - employing the decryption information to securely access a device.
30. The method of claim 29, the decryption information comprising at least one of a decryption key, an encrypted decryption key and a decryption algorithm.
31. The method claim 29, the device comprising at least one of a disk, a volatile memory, a CD ROM and a storage device.
32. A method of facilitating secure restarting of a computer system comprising:
 - receiving a decryption information ; and,
 - securely storing the decryption information, the decryption information to be employed by a BIOS component during the restarting of the computer system from a hibernate mode.
33. A data packet transmitted between two or more computer components that facilitates secure restarting a computer system the data packet comprising:
 - decryption information to be employed by a BIOS component to facilitate decryption of a hibernate file, the decryption information comprising at least one of a decryption key, an encrypted decryption key and a decryption algorithm.
34. A computer readable medium storing computer executable components of a cryptographic component comprising:
 - a communication component that receives a request for decryption information from a BIOS component; and,

a retrieval component that retrieves decryption information based, at least in part, upon the request, the retrieval component providing the decryption information to the communication component, the communication component providing the decryption information to the BIOS component.

35. A cryptographic component comprising:

means for receiving a request for decryption information from a BIOS component;

means for retrieving decryption information based, at least in part, upon the request; and,

means for providing the decryption information to the BIOS component.